

ED 017 809

AC 002 020

INFORMATION SOURCE AND NEED HIERARCHIES OF AN ADULT POPULATION IN FIVE MICHIGAN COUNTIES. PAPER PRESENTED AT A NATIONAL SEMINAR ON ADULT EDUCATION RESEARCH (CHICAGO, FEBRUARY 11-13, 1968).

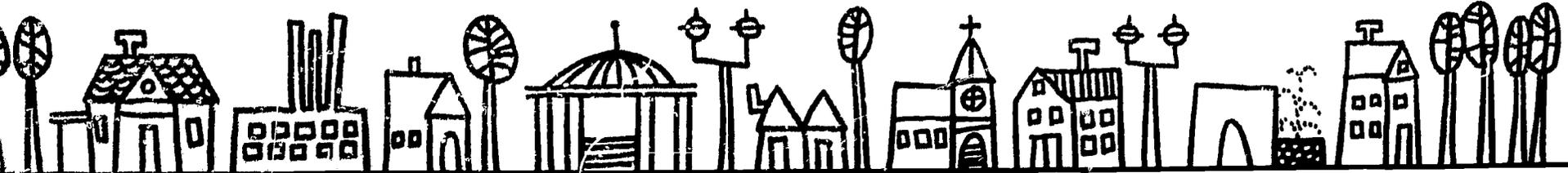
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MICHIGAN ST. UNIV., EAST LANSING, INST.COM.DEVELOP.

PUB DATE FEB 68

EDRS PRICE MF-\$0.25 HC-\$0.96 22P.

DESCRIPTORS- \*INFORMATION SOURCES, \*INFORMATION NEEDS, \*RURAL AREAS, \*ADULTS, SURVEYS, RURAL EXTENSION, ADULT EDUCATION, MASS MEDIA, HUMAN RESOURCES, EDUCATIONAL BACKGROUND, RESIDENTIAL PATTERNS, ANALYSIS OF VARIANCE, STATISTICAL DATA, SEX DIFFERENCES, AGE DIFFERENCES, COLLEGES, PUBLICATIONS, MICHIGAN,

IN A 1965 SURVEY OF FIVE COUNTIES IN THE GRAND TRAVERSE BAY REGION OF MICHIGAN, DATA ON INFORMATION SOURCES AND NEEDS WERE OBTAINED FROM A TWO PERCENT SAMPLE OF HOUSEHOLDS. ADULT SUBJECTS WERE ASKED TO IDENTIFY TOPICS OF IMPORTANCE IN EVERYDAY LIFE ON WHICH IT WAS "PARTICULARLY DIFFICULT TO FIND USEFUL AND RELIABLE INFORMATION," AND SOURCES OF INFORMATION PRESENTLY IN USE CONCERNING THESE TOPICS. (FINANCIAL MATTERS, OCCUPATIONAL, PROFESSIONAL, AND FARMING MATTERS, PUBLIC AFFAIRS, CONSUMER INFORMATION AND EDUCATIONAL AND CAREER PLANNING WERE THE MAJOR TOPICS NAMED.) RESULTS WERE ANALYZED IN TERMS OF THE HIERARCHICAL PATTERNS OF INFORMATION NEEDS AND INFORMATION SOURCES BY RESIDENCE, EDUCATION, AGE, AND SEX. THE LOCAL POPULATION WAS FOUND TO RELY HEAVILY ON THE MASS MEDIA AND VARIOUS KINDS OF READING MATTER FOR ALL TOPIC AREAS AND ON INSTITUTIONAL SOURCES AND OFFICIALS IN CERTAIN CASES. YOUNG ADULTS RELIED ALSO ON FRIENDS AND RELATIVES AND EXHIBITED THE HIGHEST LEVEL OF NEED FOR NEW INFORMATION. ADULT EDUCATION PROGRAMS WERE SIGNIFICANT SOURCES IN FEW TOPIC AREAS AND FOR ONLY SELECTED CLIENTELE GROUPS. OBSERVATIONS WERE MADE ABOUT THE IMPLICATIONS OF THE DATA FOR ADULT EDUCATIONAL PROGRAM DEVELOPMENT. (THE DOCUMENT INCLUDES SIX TABLES.) THIS PAPER WAS PRESENTED AT A NATIONAL SEMINAR ON ADULT EDUCATION RESEARCH (CHICAGO, FEBRUARY 11-13, 1968). (AUTHOR/LY)



ED017809

# Institute for Community Development

INFORMATION SOURCE AND NEED HIERARCHIES  
OF AN ADULT POPULATION IN FIVE MICHIGAN COUNTIES

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INFORMATION SOURCE AND NEED HIERARCHIES OF  
AN ADULT POPULATION IN FIVE MICHIGAN COUNTIES<sup>1</sup>

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ABSTRACT In a 1965 survey of five counties in the Grand Traverse Bay region data concerning information sources and needs were obtained from a 2 percent sample of households. Adult subjects were asked to identify 1) topics of importance in their everyday lives about which they had found it "particularly difficult to obtain useful and reliable information," and 2) sources of information presently being utilized concerning these topics. Results were analyzed in terms of the hierarchical patterns of information needs and information sources by residence, education, age, and sex. The local population was found to rely heavily upon the mass media and various kinds of reading matter for all topic areas and upon institutional sources and officials in certain cases. Young adults relied also upon friends and relatives and exhibited the highest level of need for new information. Adult education programs were significant sources in few topic areas and for only selective clienteles. Observations were made about the implications of the data for adult educational program development.

<sup>1</sup>A revised and expanded version of a paper read at the annual meetings of the Rural Sociological Society, Miami Beach, Florida, August 1966, based on a survey completed under a contract from the Federal Extension Service.

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INFORMATION SOURCE AND NEED HIERARCHIES  
OF AN ADULT POPULATION IN FIVE MICHIGAN COUNTIES

INTRODUCTION

Professionals who work in the field of Cooperative Extension, University Extension, and other adult education programs have attempted to provide programs aimed at filling the needs and desires of people in local communities. Because of the amount and rapidity of change now penetrating even the remotest areas, the agencies providing adult educational services of various kinds to local clientele have had to be concerned with the changing pattern of needs in response to a wide variety of changing conditions of everyday life.

Before adequate adult education programs can be developed, it is necessary to know something of the "information hierarchy" of local people. What kinds of topics are of practical and educational interest to such clientele? What are their present sources of information about certain topics of importance in carrying on their daily lives? What kinds of concerns do people have which could be potentially served by adult educational programming? What specific types of clientele might be served by programs of particular types? All these questions are of intense interest to persons involved in the design and provision of services accurately attuned to the needs of the local community.

The research reported in this paper is concerned specifically with an inquiry into the information hierarchy of people in a largely rural community of Michigan. The effort was to identify the sources of information used by people in a local area on a variety of subjects pertinent to carrying on their daily lives and the needs these people feel for new information.

The questions to which we shall address ourselves in this report are, 1) What are the types of information sources used by local people in connection with certain topics of concern in everyday life? and 2) What are the topics about which local people feel the need for useful and reliable information, but find it difficult to get? The answers to these questions reveal something about the utility and the validity which the people attribute to present information sources on the one hand, and, on the other, provide insight into the concerns which people have for new information.

THE RESEARCH SITE

The site selected for the research herein reported was a community in the northwestern part of the lower peninsula of Michigan. The five counties of the Grand Traverse Bay region (Antrim, Benzie, Grand Traverse, Kalkaska and Leelanau Counties) are situated in something of an arc around the Bay, with the major city in the area, Traverse City (population 18,300),

located at the hub. This five-county area constitutes a "natural area" of trade, and, as such, is a more or less integrated urban-rural community. The entire five-county area contains approximately 65,000 year-round residents with the principal concentration in or near Traverse City. The cherry industry is the primary, agricultural activity of this region, while summer and winter tourism make up a secondary, commercial activity.

The adult education services in the area include county agricultural extension offices in each of the five counties, a two-year community college located in Traverse City, and the continuing education services of the state universities.

Altogether, the Grand Traverse Bay area can be considered not atypical of urban-rural communities found in this region of the country. To the extent that this area is representative, our results may have applicability to adult educational programming in other such communities.

#### THE METHOD OF THE RESEARCH

The data in this study were collected as part of a 1965 survey covering many aspects of the living patterns and styles of life of the inhabitants of the Grand Traverse Bay area. Data were obtained by means of self-administered questionnaires completed under the supervision of 135 local volunteer interviewers trained in the field by members of the project staff. Interviewers were members of county extension clubs in the areas surveyed. The use of resident volunteers had the utility simultaneously of 1) providing for possible creative involvement of local citizens in community self-study, and 2) permitting an economy in the research process which allowed for expansion in the scope of the study and the size of the sample. The function of the interviewers was to gain entree to the household group, build rapport necessary to cooperation in the survey, and insure that each household member filled out his questionnaire independently. All survey materials were then sealed in the presence of the interviewees for immediate return to the University.

From census data it was estimated that the area contained approximately 18,600 households, and a 2 percent sample (about 400 households) was selected systematically from county tax rolls by project staff personnel for purpose of the study. The sample in Traverse City was selected from the current street index. A partially successful attempt was made to distribute the sample by size of population in each minor civil division. Factors which may have made the sample somewhat less elegant than would have been ideal include 1) dissimilar source lists used for urban and rural populations, 2) possible unaccounted for variations in the number of persons composing household units in the various areas, 3) renters, not-at-homes, and refusals. The biasing effect of occupancy by other than property owners in rural areas was mitigated by a procedural instruction to the interviewers to "take anyone who happens to live in the house." The relatively low refusal rate seemed to be at least partly attributable to the fact that in many cases

the interviewer volunteers were personally familiar with the households sampled in their townships. Overall, the resulting sample was highly representative numerically among the five counties and as between urban (Traverse City) and rural areas. The sample contained proportionately more persons in the intermediate age group (36-64 years) and fewer in the younger (21-35 years) and older (65 years and older) age groups than is the case for the population of the five-county region. In addition, the mean years-of-education-completed by sample householders turned out to be greater than the total population average, however, all educational levels were sufficiently represented to permit amount-of-education comparisons of responses.

The survey item dealing with identification of information sources included a series of specified topics of relevance to everyday life in a gridtype closed choice question allowing for single or multiple responses. (Results are reported in Tables 1 - 5.) The survey item dealing with identification of topics about which "useful and reliable information" was difficult to obtain was an open-ended question. It was placed in sequence ahead of that on information sources in order to minimize 'response set' in respect to the inquiry about information needs. (Results are reported in Table 6.)

Data were obtained concerning the sources of information used in connection with some twenty different topics of relevance to affairs of everyday life, including planning for the future. For this report, results are presented for a selection of five of the more important of these general topics as indicated in responses to the question concerning information needs of the local people. These topic areas are, 1) financial matters; money management, investment, credit, 2) occupational, professional or farm problems, practices, and techniques, 3) community, state, and national affairs, 4) consumer information on products and services, including clothing and fashion, and 5) educational and occupational planning and opportunities; career information and outlook. Comparisons are made between the responses of urban and rural dwellers, between persons of higher and lower educational attainments, among different age groups, and between the sexes. These familiar cross-classifications permit development of useful profiles of potential target clienteles of adult educational programming.

## INFORMATION SOURCES

### 1. Financial Matters; Money Management, Investment, Credit

Information sources used in connection with financial matters, money management, investment, and credit are shown in Table 1. Examination of this table reveals the hierarchy of sources relied upon by local people; overall, "bankers, brokers, and finance companies" rank as the most important source, with "books and pamphlets" and the mass media ranking second and third, respectively. The percentage of persons listing such sources drops off rapidly (45.2% to 11.6% and significantly

**T A B L E 1. FINANCIAL MATTERS: MONEY MANAGEMENT, INVESTMENT, CREDIT: Information Sources by Urban-Rural Residence, by Education Level, by Age Group, and by Sex in Per Cent; Adults**

Source	Control Categories									
	Total <sup>1</sup>	Residence		Education		Age Group			Sex	
		Urban	Rural	HS Grad or less	Some Coll or more	21 - 35	36 - 64	65 - Older	Male	Female
Bankers, brokers, and finance companies	45.2 <sup>***</sup>	44.3	45.5	42.3 <sup>†</sup>	50.0 <sup>†</sup>	51.5 <sup>**</sup>	47.4 <sup>**</sup>	29.6 <sup>**</sup>	49.7 <sup>†</sup>	41.3 <sup>†</sup>
Books and pamphlets	11.6 <sup>***</sup>	13.2	11.5	9.3 <sup>**</sup>	16.3 <sup>**</sup>	13.1	13.2	5.6	12.2	11.7
Radio, TV, magazines, and newspapers	9.8 <sup>***</sup>	10.9	9.4	9.3	10.5	12.1	10.4	4.6	10.3	9.3
Family doctor, lawyer, or other professional person	9.5	12.1	8.6	7.9 <sup>x</sup>	12.0 <sup>x</sup>	12.1	10.0	4.6	8.8	10.1
Personal or family friends	8.9	10.3	8.4	7.5	11.2	17.2 <sup>**</sup>	8.4 <sup>**</sup>	3.7 <sup>**</sup>	9.7	8.2
Family relatives	7.7	8.6	7.4	6.1 <sup>†</sup>	10.5 <sup>†</sup>	13.2 <sup>***</sup>	6.3 <sup>***</sup>	4.6 <sup>***</sup>	7.8	7.7
Other sources (mean percentage)	2.7	2.9	2.7	2.1	3.8	2.8	3.0	1.4	2.8	2.7
Sum of Responses	805	218	587	433	372	148	586	71	394	411
Sample of Persons	686	174	512	428	258	99	479	108	320	366
Mean Number of Information Sources Used	1.17	1.25	1.15	1.01	1.44	1.49	1.22	0.66	1.23	1.12

<sup>1</sup>Sum of percentages does not necessarily equal 100 per cent.  
<sup>x</sup>Difference(s) between/among subcategories approaches significance at .05 level (X<sup>2</sup>).  
<sup>†</sup>Difference(s) between/among subcategories significant at .05 level (X<sup>2</sup>).  
<sup>\*\*</sup>Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).  
<sup>\*\*\*</sup>Difference(s) between/among subcategories significant at .001 level (X<sup>2</sup>).

(beyond .001 level by Chi-square method) from the most important ranking source to the second. "Family relatives" and "personal or family friends" are notably more important sources of information than certain other potential sources (not reported in the table) which are apparently not used very much at all, namely the local extension program (2.6%), adult educational services (1.7%), and Northwestern Michigan College (0.3%).

Examination of the urban-rural dimension shows that, in general, there is no important difference between sources of urban and rural residents, although the rank order of sources does begin to shift at the level of the third ranking source. There is a somewhat higher mean response level for urban (1.25) than for rural (1.15) residents, indicating that the urban dwellers are slightly broader in their selection of information. Persons of higher educational attainment show a greater mean response level (1.44) than those with less education (1.01), and in the Grand Traverse Bay area, residence and education variables are linked in the usual fashion, with mean years-of-education-completed increasing as one approaches the urban area.

Analysis of age differentials reveals that the youngest age group (21-35 years) relies more on "bankers, brokers, and finance companies", and considerably more on "family relatives" and "personal or family friends" than do the older groups. It can be seen that the mean response level declines with age (from 1.49 to 0.66). The low response level among the older persons in the sample might be interpreted as indicating an accumulation of experience in financial matters which results in less interest in outside sources.

Men seem to rely on a slightly wider range of sources than women (1.23 to 1.12) and the rank order of the sources used begins to differ at the level of the third ranking source.

## 2. Occupational, Professional or Farm Problems, Practices, and Techniques

Data were gathered about information sources in connection with occupational, professional, and farm matters from the adult males only, and the results are presented in Table 2. "Books and pamphlets" are selected as the most important information source, with the mass media and Cooperative Extension ranking second and third, respectively. From this point reliance drops, for other sources, to within the neighborhood of 10 percent. Although the overall mean response level is similar for urban (1.55) and rural (1.54) males, there are interesting differences in the configuration of their source hierarchies. Greater use seems to be made by urban dwellers of books and pamphlets (45.2%), the mass media (32.9%), and professional persons (15.1%), while reliance upon the Extension Service is shown to be mostly on the part of rural residents (25.4%). "Personal or family friends" are a significantly (.05 level) more important source for rural than for urban residents.

T A B L E 2. OCCUPATIONAL, PROFESSIONAL, CR FARM PROBLEMS, PRACTICES, AND TECHNIQUES: Information Sources by Urban-Rural Residence, by Education Level, and by Age Group in Per Cents; Adult Males Only

Source	Control Categories									
	Total <sup>1</sup>	Residence		Education		Age Group			65 - Older	
		Urban	Rural	HS Grad' or less	'Some Col' or more	21 - 35	36 - 64	65 - Older		
Books and pamphlets	37.7***	45.2	35.3	33.8 <sup>x</sup>	44.5 <sup>x</sup>	48.8 <sup>+++</sup>	41.5 <sup>+++</sup>	13.7 <sup>+++</sup>		
Radio, TV, magazines, and newspapers	25.6***	32.9	23.2	22.1 <sup>x</sup>	31.8 <sup>x</sup>	36.6	25.5	17.6		
Cooperative Extension Service	22.6***	13.7 <sup>+</sup>	25.4 <sup>+</sup>	24.1	20.0	22.0	25.0	13.7		
Family doctor, lawyer, or other professional person	10.8***	15.1	9.4	8.2 <sup>x</sup>	15.5 <sup>x</sup>	12.2	11.8	5.9		
Adult education services of state colleges and universities	10.2	8.2	10.8	6.7 <sup>++</sup>	16.4 <sup>++</sup>	7.3	11.8	5.9		
Public or other administrators	9.8	12.3	9.1	7.7	13.6	9.8	11.3	3.9		
Personal or family friends	7.2	1.4 <sup>+</sup>	9.1 <sup>+</sup>	7.2	7.3	12.2	7.5	2.0		
Other sources(mean percentage)	3.8	3.2	4.0	2.8	5.7	4.6	3.9	3.0		
Sum of Responses	471	113	358	257	214	76	351	44	51	
Mean Number of Information Sources Used	1.54	1.55	1.54	1.32	1.95	1.85	1.65	0.86		

<sup>1</sup>Sum of percentages does not necessarily equal 100 per cent.

\*\*\* Difference(s) between/among totals significant at .001 level + by Chi-square method.

<sup>x</sup>Difference(s) between/among subcategories approaches significance at .05 level (X<sup>2</sup>).

++ Difference(s) between/among subcategories significant at .05 level (X<sup>2</sup>).

+++ Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).

+++ Difference(s) between/among subcategories significant at .001 level (X<sup>2</sup>).

There is a notable difference in the mean response level by amount of education, with a higher mean number of sources (1.95 vs. 1.32) used by persons with at least "some college." The rank order of sources begins to differ for the two education groups at the level of the second ranking source. The better educated males understandably refer to educational facilities more often, although they refer to the Cooperative Extension Service less often, than do the poorer educated males. This trend is corroborated by the difference in reliance (not reported in the Table 2) upon another potential source of information--Northwestern Michigan College; while this source ranked twelfth (3.9%) overall, there is a significant difference (.01 level) in its importance for those with "some college" (9.1%) and those with a high school degree or less (1.0%).

Concerning the source hierarchies of the three age groups, the mean response level is seen to decline with increasing age and the configuration of sources for the oldest age group notably differs from that of the two younger groups. The mass media are the first ranking sources for the oldest persons, but even so, at a relatively low level of utilization; 17.6%--this compared with 48.8% and 41.5% for the first ranking source (books and pamphlets) of the younger groups.

The high overall response level for the youngest age group, as it contrasts with that for the oldest group, would appear natural under circumstances of their greater mean years of education completed, as an age group, their recent entry into adult roles and the obvious relevance and importance of outside information during this initial and strategic career phase. For the oldest age group, such information may well be considered to be of marginal interest.

### 3. Community, State, and National Affairs

Information sources used in connection with community, state, and national affairs are reported in Table 3 and show the expected pattern of major reliance upon the mass media, with lesser but important attention being given to "books and pamphlets" and to "public or other administrators." In addition to these three important sources, some use is made of other, institutional sources, such as the schools, adult educational facilities, and the church. The fifth ranking source appears to be in informal contacts; "personal or family friends." The Cooperative Extension Service and Northwestern Michigan College, (neither of which is reported in Table 3), ranked eighth (3.8%) and tenth (3.1%) respectively, indicating that, overall, they are relatively unimportant sources of information concerning community and public affairs.

Urban and rural residents appear to share much the same utilization of information sources, with no statistically significant differences being found between their levels of reliance on particular sources. Urban residents do tend to exhibit a slightly higher overall level of response (1.88) than rural residents (1.78). The pattern of this higher response level for urban residents appears to be in a greater usage of the three "important sources" rather than in reliance on a wider range of sources.

A B L E 3. COMMUNITY, STATE, AND NATIONAL AFFAIRS: Information Sources by Urban-Rural Residence, by Education Level, by Age Group, and by Sex in Per Cents; Adults

Source	Control Categories									
	Total <sup>1</sup>	Residence		Education		Age Group			Sex	
		Urban	Rural	HS Grad: or less	Some Col: or more	21 - 35	36 - 64	65 - Older	Male	Female
Radio, TV, magazines, and newspapers	77.8 <sup>***</sup>	81.0	76.8	72.2 <sup>**</sup>	87.2 <sup>***</sup>	80.8 <sup>***</sup>	55.6 <sup>***</sup>	75.9	79.5	
Books and pamphlets	38.0 <sup>***</sup>	42.0	36.7	30.4 <sup>***</sup>	42.4 <sup>*</sup>	39.7 <sup>*</sup>	26.9 <sup>*</sup>	37.5	38.5	
Public or other administrators	20.8 <sup>***</sup>	21.3	20.7	17.8 <sup>*</sup>	18.2 <sup>**</sup>	23.8 <sup>**</sup>	10.2 <sup>**</sup>	20.6	21.0	
School teachers, counselors, officials, or P. T. A.	9.8 <sup>***</sup>	9.2	10.0	9.8	14.1	9.4	7.4	8.4	10.9	
Personal or family friends	6.9	9.8	5.9	5.8	14.1	5.4	6.5	8.1	5.7	
Adult education services of state colleges and universities	5.4	4.0	5.9	3.0 <sup>***</sup>	7.1	5.4	3.7	3.8	6.8	
Church	5.2	4.6	5.5	4.9	7.1	5.2	3.7	3.4 <sup>*</sup>	6.8 <sup>*</sup>	
Other sources (mean percentage)	2.1	2.0	2.1	1.4	3.8	1.8	1.6	1.8	2.3	
Sum of Responses	1239	327	912	664	219	883	137	551	688	
Mean Number of Information Sources Used	1.81	1.88	1.78	1.55	2.21	1.84	1.27	1.72	1.88	

<sup>1</sup>Sum of percentages does not necessarily equal 100 per cent.

\*\*\* Difference(s) between/among totals significant at .001 level by Chi-square method.

\*\* Difference(s) between/among subcategories approaches significance at .05 level (X<sup>2</sup>).

\* Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).

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\* Difference(s) between/among subcategories significant at .05 level (X<sup>2</sup>).

\*\* Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).

\*\*\* Difference(s) between/among subcategories significant at .001 level (X<sup>2</sup>).

Significant differences are found in responses, based on educational differentials. Those with at least some college show a higher mean response level and a significantly greater utilization of the three "important sources" than those with less education. A dramatic difference is evident in respect to the usage of "books and pamphlets": about fifty-one percent of the better educated indicate reliance on this source while this is true for only about thirty percent of the less educated. Differences are found also in reliance on other educational facilities; the better educated make more use of adult educational services (9.3% vs. 3.0%, significant at .001 level), the Cooperative Extension Service (6.2% vs. 2.3%, significant at .05 level), and Northwestern Michigan College (4.7% vs. 2.1%, approaching significance at .05 level). (Neither of the latter two sources is reported in the table.) While it is to be noted that the level of reliance on these three educational sources is low for both high- and low-education groups, the pattern is consistent in that the better educated make more use of educational sources.

The pattern of declining overall response level with each successive age group is again seen. The age groups differ significantly in their levels of reliance upon the three "important sources," although their rank ordering of the seven sources is not dissimilar. Utilization of Cooperative Extension and Northwestern Michigan College (neither is reported in the table) is meager (3.8% and 3.1% respectively overall) and apparently tends to decline with increasing age (from 4.0% to 3.7% for Cooperative Extension and from 5.1% to 1.9% for Northwestern Michigan College).

Reliance upon the three "important sources" is remarkably similar for the two sexes, and this similarity holds for the less important sources except that of the "church," which is significantly more important to females.

#### 4. Consumer Information on Products and Services, Including Clothing and Fashion

Data presented in Table 4 indicate that local people identify the mass media as the most important source of information on consumer matters, with over half of the sample listing this source. "Books and pamphlets" rank second, with almost forty percent of the sample listing this source. The third is "retail stores" (26.1%) and the fourth is "personal or family friends" (15.6%). Differences among the four most important sources were statistically significant (.001 level). The Cooperative Extension Service ranks fifth (14.7%), and "family relatives" and "commercial salesmen or agents" are a relatively low sixth (9.3%) and seventh (8.2%), respectively. Adult education services and Northwestern Michigan College (neither is reported in the table) are not utilized to any extent as sources of information about consumer matters, ranking eleventh (1.6%) and fifteenth (0.3%), respectively.

The rank order of the three most important sources is the same for urban and rural residents, although there is a tendency toward a higher level of utilization of these sources on the part of urban dwellers. The

**T A B L E 4. CONSUMER INFORMATION ON PRODUCTS AND SERVICES, INCLUDING CLOTHING AND FASHION: Information Sources by Urban-Rural Residence, by Education Level, by Age Group, and by Sex in Per Cents; Adults**

Source	Control Categories										
	Total <sup>1</sup>		Residence		Education		Age Group			Sex	
	Urban	Rural	'HS Grad or less	'Some Coll or more	21 - 35	36 - 64	65 - Older	Male	Female		
Radio, TV, magazines, and newspapers	59.2	53.7	50.2 <sup>***</sup>	63.2 <sup>***</sup>	65.7 <sup>***</sup>	59.5 <sup>***</sup>	25.9 <sup>***</sup>	41.2 <sup>***</sup>	67.2 <sup>***</sup>		
Books and pamphlets	39.1	38.7	35.7 <sup>*</sup>	43.8 <sup>*</sup>	45.5 <sup>***</sup>	42.0 <sup>***</sup>	18.5 <sup>***</sup>	34.4 <sup>+</sup>	42.6 <sup>+</sup>		
Retail stores	30.5	24.6	23.6 <sup>x</sup>	30.2 <sup>x</sup>	38.4 <sup>***</sup>	26.5 <sup>***</sup>	13.0 <sup>***</sup>	23.4	28.4		
Personal or family friends	17.2	15.0	12.6 <sup>**</sup>	20.5 <sup>**</sup>	27.3 <sup>***</sup>	15.0 <sup>***</sup>	7.4 <sup>***</sup>	16.2	15.0		
Cooperative Extension Service	9.2 <sup>+</sup>	16.6 <sup>+</sup>	11.4 <sup>**</sup>	20.2 <sup>**</sup>	11.1 <sup>**</sup>	17.3 <sup>**</sup>	6.5 <sup>**</sup>	5.9 <sup>***</sup>	22.4 <sup>***</sup>		
Family relatives	8.6	9.6	7.9 <sup>***</sup>	11.6 <sup>***</sup>	22.2 <sup>***</sup>	7.5 <sup>***</sup>	5.6 <sup>***</sup>	8.4	10.1		
Commercial salesmen or agents	10.3	7.4	6.1 <sup>+</sup>	11.6 <sup>+</sup>	11.1	8.6	3.7	10.3 <sup>x</sup>	6.3 <sup>x</sup>		
Other sources (mean percentage)	1.3	1.6	1.2	2.0	1.9	1.6	1.0	1.7	1.4		
Sum of Responses	321	915	675	561	234	906	96	493	743		
Mean Number of Information Sources Used	1.80	1.79	1.58	2.17	2.36	1.89	0.89	1.54	2.03		

<sup>1</sup>Sum of percentages does not necessarily equal 100 per cent.

\*\*\* Difference(s) between/among totals significant at .001 level by Chi-square method.

<sup>x</sup>Difference(s) between/among subcategories approaches significance at .05 level (X<sup>2</sup>).

<sup>+</sup>Difference(s) between/among subcategories significant at .05 level (X<sup>2</sup>).

<sup>\*\*</sup>Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).

<sup>\*\*\*</sup>Difference(s) between/among subcategories significant at .001 level (X<sup>2</sup>).

one statistically significant difference found between urban and rural residents is in utilization of the Cooperative Extension Service; as in connection with "occupation, professional, or farm problems, etc.," (Table 2), this source is more important to rural residents than to urban residents (16.6% vs. 9.2%).

Analysis of responses by amount of education reveals the rank order of sources for the better educated to be similar to that for the poorer educated. The overall level of utilization is higher for those with at least some college. This trend to a higher level of response among the better educated is consistent through each of the seven sources reported in the table.

The responses of the different age groups show the same pattern as with other topic areas, namely, a decline of overall response level--in this case a rather substantial drop from the youngest (2.36) to the oldest (0.89) age group. While the rank order of sources for the three age groups is the same for the three most important sources, there are vast differences in levels of utilization. Almost two-thirds of the youngest group list the mass media as a source while this is true for only about one-quarter of the oldest group. This considerable decline in reliance upon outside sources is seen in the case of "books and pamphlets" (45.5% for the youngest to 18.5% for the oldest), and in the case of "retail stores" (38.4% for the youngest to 13.0% for the oldest). Interestingly, the youngest age group shows a notably and uniquely high reliance upon the informal contacts with "family relatives" (22.2%) and "personal or family friends" (27.3%), a pattern noted earlier in respect to financial matters (Table 1).

Females show a higher overall level of response than males (2.03 vs. 1.54) with a significantly greater utilization than males of such sources as the mass media (67.2% vs. 41.2%), "books and pamphlets" (42.6% vs. 34.4%), and the Cooperative Extension Service (22.4% vs. 5.9%). There seems to be no important difference between the sexes in reliance upon "family relatives" and "personal or family friends," although there is a possible trend to males giving more attention to "commercial salesmen or agents."

#### 5. Educational and Occupational Planning and Opportunities: Career Information and Outlook

Results in connection with the subject of educational/occupational/career matters are presented in Table 5. Data are presented for adults with children. Contacts with the school staffs are the most important source of information for parents in this topic area, with 46.7% of the parents listing "school teachers, counselors, officials, or P.T.A." "Books and pamphlets" and the mass media are lesser but important sources indicated by 33.2% and 30.7% of the sample, respectively. There is a drop in response to about the eleven percent level in the case of the next four sources: "personal or family friends" (12.5%), Northwestern Michigan College (11.0%), the church (11.0%), and adult education services (9.5%). The Cooperative Extension Service, (not reported in the table), ranked eighth (7.6%).

**T A B L E 5. EDUCATIONAL AND OCCUPATIONAL PLANNING AND OPPORTUNITIES; CAREER INFORMATION AND OUTLOOK: Information Sources by Urban-Rural Residence, by Education Level, by Age Group, and by Sex in Per Cents; Adults with Children**

Source	Control Categories								
	Total <sup>1</sup>	Residence		Education		Age Group		Sex	
		Urban	Rural	'HS Grad' or less	'Some Coll' or more	21 - 35	36 - Older	Male	Female
School teachers, counselors, officials, or P. T. A.	46.7 <sup>***</sup>	44.5	45.5	48.7	53.5	44.9	43.5	49.6	
Books and pamphlets	33.2 <sup>***</sup>	32.2	29.4 <sup>†</sup>	39.0 <sup>†</sup>	37.4	32.1	32.7	33.6	
Radio, TV, magazines, and newspapers	30.7 <sup>***</sup>	31.6	28.7	33.7	27.3	31.6	29.1	32.0	
Personal or family friends	12.5 <sup>***</sup>	12.9	10.5	15.5	22.2 <sup>***</sup>	9.9 <sup>***</sup>	14.3	10.8	
Northwestern Michigan College	11.0	8.3 <sup>**</sup>	8.0 <sup>†</sup>	15.5 <sup>†</sup>	9.1	11.5	8.1 <sup>x</sup>	13.6 <sup>x</sup>	
Church	11.0	11.2	11.9	9.6	17.2 <sup>†</sup>	9.4 <sup>†</sup>	8.1 <sup>x</sup>	13.6 <sup>x</sup>	
Adult education services of state colleges and universities	9.5	9.2	6.6 <sup>†</sup>	13.9 <sup>†</sup>	8.1	9.9	8.1	10.8	
Other sources (mean percentage)	4.7	4.6	3.7	6.2	5.3	4.6	4.6	4.6	
Sum of Responses	909	258 / 651	487 / 286	422 / 187	215 / 99	694 / 374	404 / 223	505 / 250	
Mean Number of Information Sources Used	1.92	2.06 / 1.87	1.70 / 2.26	2.17 / 1.86	2.17 / 1.86	2.17 / 1.86	1.81 / 2.02	2.02	

<sup>1</sup>Sum of percentages does not necessarily equal 100 per cent.

\*\*\*Difference(s) between/among totals significant at .001 level by Chi-square method.

<sup>x</sup>Difference(s) between/among subcategories approaches significance at .05 level (X<sup>2</sup>).

<sup>†</sup>Difference(s) between/among subcategories significant at .05 level (X<sup>2</sup>).

<sup>\*\*</sup>Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).

<sup>\*\*\*</sup>Difference(s) between/among subcategories significant at .001 level (X<sup>2</sup>).

Urban and rural residents agree in their rank ordering of the three most important sources, although there is a tendency for urban residents to exhibit a higher level of utilization of school programs and personnel and of "books and pamphlets." The rank ordering of sources begins to differ at the level of the fourth ranking source; urban residents gravitate to Northwestern Michigan College whereas rural residents mention "personal or family friends." In fact the most notable difference is in the case of utilization of Northwestern Michigan College: the urban residents indicate a significantly (.01 level) greater utilization of this source than rural residents (18.4% vs. 8.3%).

As has been the case with other topic areas examined, the better educated exhibit a higher overall level of response (2.26) than the less well educated (1.70). The response level of the better educated is higher in six of the seven sources reported in the table, and significantly (.05 level) higher in connection with "books and pamphlets" (39.0% vs. 29.4%), Northwestern Michigan College (15.5% vs. 8.0%), and adult education services (13.9% vs. 6.6%).

Two age groups of parents were examined; those whose age was between twenty-one and thirty-five and whose children would presumably range between infancy and high school age, and those whose age was thirty-six or older and whose children were likely to be, on the average, older, with many already in adult occupational categories.

The younger group of parents exhibits a higher overall level of response (2.17) than the older group (1.86). Allowing for this proportionately higher level of response by the younger group, the two groups show a similar pattern of utilization of sources, with two notable and significant exceptions; "personal or family friends" and the church. As in the case of each of the other topic areas examined (Tables 1 - 4), the younger adults indicate an uniquely greater reliance upon contacts with friends than do the older adults (in this instance 22.2% vs. 9.9%). Interestingly, the church is mentioned more often by the younger adults (17.2%) than by the older ones (9.4%).

No very important differences of reliance emerge between males and females in connection with this topic area. While the females show a greater overall response level (2.02 vs. 1.81), and some differing trends between males and females appear in the less important sources, none of the differences noted is statistically significant.

#### 6. Information Found Difficult to Obtain; Expressed Information Needs.

The adult respondents were asked to identify "skills or areas of knowledge important in (their) everyday activity" about which it had been particularly difficult to obtain "useful and reliable information." As shown in Table 6, about twenty-five percent of the sample members listed one or more such subjects in response to this question. If this proportion of professed difficulty can be generalized to the population of the five-county area, it would indicate that a substantial number of persons in this

TABLE 6. INFORMATION FOUND DIFFICULT TO OBTAIN: Expressed Information Needs by Urban-Rural Residence, by Education Level, by Age Group, and by Sex in Per Cents; Adults

Topic <sup>1</sup>	Control Categories									
	Total <sup>2</sup>	Residence		Education		Age Group			Sex	
		Urban	Rural	HS Grad <sup>3</sup> or less	Some Coll <sup>3</sup> or more	21 - 35	36 - 64	65 - Older	Male	Female
Financial matters: money management, investment, credit	19.6*	30.0 <sup>+</sup>	14.2 <sup>+</sup>	15.8	22.7	23.5	17.5	26.3	21.4	18.0
Occupational, professional, or farm problems, practices, and techniques	16.8*	13.3	18.6	15.8	17.5	17.7	16.8	15.8	22.6 <sup>+</sup>	11.2 <sup>+</sup>
Community, state, and national affairs	11.6*	16.7	8.8	10.5	12.4	14.7	10.8	10.5	16.7 <sup>+</sup>	6.7 <sup>+</sup>
Consumer information on products and services, including clothing and fashion	11.0*	15.0	8.8	5.3 <sup>+</sup>	15.4 <sup>+</sup>	14.7	10.8	5.2	8.3	13.5
Educational and occupational planning and opportunities; career information and outlook	8.1*	5.0	9.7	6.6	9.3	8.8 <sup>x</sup>	5.8 <sup>x</sup>	21.1 <sup>x</sup>	3.6 <sup>x</sup>	12.4 <sup>+</sup>
All other topics pooled (includes fifteen topics)	32.9	20.0	39.9	46.0	22.7	20.6	38.3	21.1	27.4	38.2
Sum of Responses <sup>3</sup>	173	60	113	76	97	34	120	19	84	89
Percentage of Sample Indicating Information Difficult to Obtain	25.2	34.5 <sup>++</sup>	22.1 <sup>**</sup>	17.8 <sup>***</sup>	37.6 <sup>***</sup>	34.3 <sup>+</sup>	25.1 <sup>+</sup>	17.6 <sup>+</sup>	26.2	24.3

<sup>1</sup> Only first topic mentioned by each respondent is reported in this table. Hence, sum of responses (173) equals number of persons (173) indicating information on some topic difficult to obtain.

<sup>2</sup> Sum of percentages equals 100 per cent (See Note 1 above).  
<sup>3</sup> Sum of responses equals sum of persons (See Note 1 above).

\* Difference(s) between/among totals significant at .05 level (Chi-square method).  
<sup>x</sup> Difference(s) between/among subcategories approaches significance at .05 level (X<sup>2</sup>).  
<sup>+</sup> Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).  
<sup>\*\*</sup> Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).  
<sup>\*\*\*</sup> Difference(s) between/among subcategories significant at .001 level (X<sup>2</sup>).

<sup>x</sup> Difference(s) between/among subcategories approaches significance at .05 level (X<sup>2</sup>).

<sup>+</sup> Difference(s) between/among subcategories significant at .05 level (X<sup>2</sup>).

<sup>\*\*</sup> Difference(s) between/among subcategories significant at .01 level (X<sup>2</sup>).

<sup>\*\*\*</sup> Difference(s) between/among subcategories significant at .001 level (X<sup>2</sup>).

region experience some degree of frustration in getting needed information on certain topics relevant to carrying on their daily lives.

Analysis of the proportion of responses by topic area reveals a hierarchy of expressed dissatisfaction with current sources and of needs for new information. Five topic areas received over two-thirds of the responses, ranking as follows: 1) financial matters (19.6%), 2) occupational, professional, or farm matters (16.8%), 3) public affairs (11.6%), 4) consumer matters (11.0%), and 5) educational/occupational/career matters (8.1%). (This hierarchy of expressed needs, it will be remembered, served as the basis for selection of topics reported in Tables 1 - 5.) Differences among totals were statistically significant.<sup>3</sup>

Analysis of the responses by urban-rural residence reveals that, overall, a significantly (.01 level) higher proportion of urban residents than rural residents (34.5% vs. 22.1%) reports difficulty obtaining needed information. Analysis by amount of education shows that the proportion of persons with at least some college training who were dissatisfied with the information found available was significantly (.001 level) greater than--in fact, over twice that--for those with only a high school degree or less (37.6% vs. 17.8%). Among the better educated, a significantly (.05 level) higher proportion (15.4%) expressed concern about information on consumer matters than was the case with the less well educated (5.3%).

The three age groups show a declining overall level of response similar to that noted in respect to their utilization of information sources (Tables 1 - 5). The youngest age group (21-35 years) contains the highest overall proportion of persons expressing information needs (34.3%) and the oldest age group (65 years and older) contains the smallest (17.6%). Because of the very small cell size in the case of the oldest age group, the proportion indicating needs in the individual topic areas must be considered as merely suggestive.

While the overall level of expressed need is not dissimilar for males and females (26.2% and 24.3% respectively) there are some interesting qualitative differences. Predictably, more males reflected a need for information in connection with occupational, professional or farm problems, whereas information on consumer matters tends to be a preoccupation of the females. The males indicate a higher level of frustration concerning useful and reliable information concerning "community, state, and national affairs" than do the females, while the females exhibit more dissatisfaction with available information concerning educational/occupational/career matters. Inasmuch as many of these women carry out vital maternal socializing roles in their daily lives, this preoccupation on their part is not surprising.

#### SUMMARY AND INTERPRETATION

Combining the sets of data presented in Tables 1 through 6 provides a basis for assaying certain trends and patterns contained in the results as a whole. The attempt will be made cautiously to generalize these results as they would apply to the five-county population.<sup>4</sup>

In general, it appears that the people in the Grand Traverse Bay region rely substantially upon the mass media as a source of information concerning a range of matters of importance in their everyday life. The mass media ranked as the most important source in two of five topic areas examined, the second most important in a third, and the third ranking source in two other topic areas. Books and other reading matter appear also to be an important source, ranking first in one topic area and second in four others. The reliance of the people on these and other information sources is not without some reservation, however, since it appears from the sample data that about one-fourth of the population is dissatisfied with information thus obtained concerning various subjects important to them; hence, we would conclude that these sources are considered less than satisfying or adequate sources of such information.

While a variety of other sources, in addition to those mentioned above, are relied upon for the topics analyzed, personal or family friends and relatives are often mentioned--indicating a secondary but significant type of source in the overall hierarchy of information sources used. Personal or family friends rank fourth in two topic areas, fifth in two others, and seventh in another. Family relatives ranked sixth in two topic areas. This source of information in the informal but central contacts of everyday life is not unexpected, of course. But it does place these "primary" interactions significantly in the hierarchy of sources used--albeit at a subordinate level.

Residence in Traverse City or in the rural areas surrounding this community seems in itself to make relatively little difference concerning sources of information utilized. There is some exception to this general trend in the case of the Extension Service as a source; the rural dwellers tend to rely upon it as at least a significant, subordinate-level source in connection with occupational, professional or farm matters and consumer matters, while this is not so much the case for the city dwellers. There are occasional differences in utilization of other sources and some reversals in source hierarchies between urban and rural residents but these differences do not, for the most part, appear to be large or very important. The city dwellers do tend to use a higher mean number of information sources, but even this difference is not impressive. And urban residents do express a significantly higher level of difficulty than rural residents in getting needed information on matters of everyday concern, particularly financial matters.

It must be remembered that while Traverse City contains over 18,000 people, the atmosphere and style of life of the area is still very much ruralistic, even if the concentration of population happens to be more dense. In this sense, then, Traverse City may be considered as not containing, in a substantial degree, those characteristics which we consider classically "urban."

Level of education appears to be an important dimension in its relationship to the level of response and in determining, to a certain extent, the types of sources relied upon. It also substantially relates

to expression of difficulty in getting desired information. Persons who have had some college training use more sources on the average and refer to educational facilities as sources more often than do persons with a high school degree or less. In addition to this greater omniverousness on the part of the better educated in utilization of sources in their relative dissatisfaction with the information obtained. They more often indicate difficulty in obtaining "useful and reliable information" than do the less well educated. The irony of such a set of circumstances is that those who, we may conclude, by reason of their limited education, are in the most disadvantaged position in respect to evaluating the worth and validity of information appear to 1) select from the least number of potential sources of information on any topic, and 2) express the least dissatisfaction with the information thus obtained.

Of the three age groups of adults examined, the youngest group (21-35 years) exhibits both the highest level of utilization of information sources and the highest level of expressed information need. The middle age group (36-64 years) is intermediate in utilization and expressed need, while the oldest group (65 years and older) showed a relatively low level of utilization and need. Among the youngest persons there appeared to be a unique reliance upon relatives and personal or family friends. For such people, relative beginners in the many affairs and problems of adult experience, informal contacts and reenforcement from personal relationships with relatives and friends are apparently a salient source of information and guidance.

Depending on the topic area under consideration, males and females exhibit differing levels of utilization of various information sources. Consumer matters, a topic which is presumably of especial interest to women, appears to elicit from them a higher overall level of response (higher mean number of sources used) than from men. In contrast, men show a higher level of response in connection with topics of more direct concern to them, such as financial matters. While this pattern is related clearly to sex roles established in the culture, when seen alongside other trends noted in these data it implies a more general relationship between the salience of a particular topic for a person and the number of sources he is likely to rely upon concerning it; it might be hypothesized that the higher the relevance and importance of a topic, the more sources will be utilized.

Utilization of certain kinds of information sources may be related not only to salience of the topic for the individual, based on his/her specific personal role or station as such, but also to what might be described as role-related access or "exposure." The females' tendency to rely more heavily than males upon such sources as the mass media, particularly--we suspect--television and radio, may be related to their frequent, if not typical companionship with such sources during their workaday existence in the home. Males, on the other hand, by merit of their typical roles as heads of households in respect to financial management, may very well be expected to have, as they apparently do, characteristically greater "exposure" to financial institutions such as banks, finance companies, brokerages, and other agencies.

The overall levels of expressed difficulty in obtaining needed information are not dissimilar for males and females, with the notable differences again being essentially qualitative. Here, as in the case of the utilization of sources, males' attention is focused on matters salient to their typical roles; they have difficulty getting needed information concerning occupation, professional, or farm matters. The females express difficulty in getting needed information concerning consumer matters and those females with children have difficulty getting information about education/occupational/career matters. The expressed difficulty in getting information concerning financial matters is high for both sexes and the difference which exists, while not statistically significant, is in the direction of the pattern already noted.

Shifting attention more specifically to the hierarchy of expressed difficulties/needs for information concerning matters of everyday importance, we reiterate that, according to these data, a significant proportion of the population experiences frustration in obtaining information on topics of importance to them. It is to be noted that the topics listed by these dissatisfied persons could be considered, for the most part, to be objectively relevant and vital to their life roles in meeting the immediate problems of daily living, rearing children, and in planning for the future. The data indicate meaningful, relevant, and rational needs and concerns on the part of local people in connection with matters of obvious and legitimate importance to them in their daily activities.

In evaluating the actual and potential role of publicly supported adult educational programs serving such field areas as the Grand Traverse Bay region, the data here assembled would seem to be highly revealing. It is compellingly asserted by the actual and potential client groups whose tax resources support these programs that adult education should be attuned to serving relevant, salient, and rational expressed needs of the population. Our evidence indicates that such needs are readily communicated; they are for useful and reliable information concerning the basic issues of livelihood and occupation, money management, homemaking, career preparation, news, and the problems getting around successfully as a consumer in the market place.

Given these conditions it appears that, with the exceptions of rural agricultural and some home economics matters, the public adult educational, Extension, and local college facilities are relatively inconsequential sources of information concerning central matters of importance in the daily lives of most of the local population. In the case of the exceptions, agricultural technology and home economics, the possibility exists for a declining clientele for the Cooperative Extension Service. This is due to the fact that in this region, as in most others, the rural population is declining relative to the urban population and the proportion of the agriculturally employed within the rural population is itself declining. Hence, it would appear that while the Cooperative Extension Service is to some extent "effective," it serves a decreasingly significant segment of the total population. It would appear also that the other adult educational programs offered through the state universities

and the local college are utilized by a highly selective minority of the total population. Both the limited scope and the "academic" focus of these programs may account for their being listed by few persons as important sources concerning the topics investigated in this study.

Our data indicate that a substantial gap of information exists in terms of felt needs on the part of many members of the local population--needs which are not now being met by adult educational programs. This situation gives rise to the legitimate question, "What role should publicly supported adult educational programs play in the community and how restricted a clientele should they serve?" In the past, adult educators have been prone to rely on traditional, "direct" formats--principally classroom instruction--for dissemination of information. But if the selectivity of exposure of the population to these traditional programs is as strong as it appears to be, then it may be necessary to break away from this pattern and to give more attention to utilization of the mass media in a new approach with, hopefully, wider exposure and wider appeal. In short, it may be necessary for adult education to "go to where the action is;" to penetrate more successfully those channels of information utilized by the adult population.

We would anticipate that, given the unique resource base on which they are built, government-sponsored adult education programs could be adeptly designed to serve the legitimate needs expressed by these local people without seriously violating traditional public-versus-private institutional relationships. Based on our data, it would appear highly strategic for new program designs to include expanded use of "indirect" channels of the mass media. Seen in this light, highly desirable possibilities of expanded coverage for adult educational programming may be available through the development of public television and radio networks.

#### FOOTNOTES

<sup>3</sup>Though for standardization of the tables differences among totals were listed as significant at the .05 level, the  $X^2$  value in this case (13.082) would result in significance beyond the .02 level.

<sup>4</sup>It is acknowledged, of course, that the data we have here assembled are "verbal," being those professions of use and need which people consciously and voluntarily express: That this expressed use/need may be at some (unknown) variance with "actual" use/need. What variance may exist between these levels of behavior is itself an intriguing subject for research.

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